

**Publications since joining LANL  
Pinaki Sengupta, November 2007**

1. Pinaki Sengupta, and Cristian Batista, “Ground state and thermal transitions in a Field-induced spin-Supersolid phase”, to appear in *Journal of Applied Physics* as proceedings of the 52nd Magnetism and Magnetic Materials Conference, Nov.5-9, Tampa, Fl.
2. Pinaki Sengupta, and Cristian Batista, “Spin Supersolid in Anisotropic Spin-One Heisenberg Chain”, to appear in *Phys. Rev. Lett..*
3. V. S. Zapf, V. F. Correa, P. Sengupta, C. D. Batista, M. Tsukamoto, N. Kawashima, P. Egan, C. Pannea, A. Migliori, J. B. Betts, M. Jaime, A. Paduan-Filho, “A direct measurement of spin correlations using magnetostriction”, to appear in *Phys. Rev. B.*
4. S. E. Sebastian, N. Harrison, P. Sengupta, C. D. Batista, S. Francoul, E. Palm, T. Murphy, H. A. Dabkowska, and B. D. Gaulin, “Fractalization drives crystalline states in a frustrated spin system” submitted to *Phys. Rev. Lett..*
5. C. D. Batista, J. Schmalian, N. Kawashima, P. Sengupta, S. E. Sebastian, N. Harrison, M. Jaime, and I. R. Fisher, “Geometric Frustration and Dimensional Reduction at a Quantum Critical Point” *Phys. Rev. Lett.* **98**, 257201 (2007).
6. Pinaki Sengupta, and Cristian Batista, “Field-induced supersolid phase in Spin-one Heisenberg models”, *Phys. Rev. Lett.* **98**, 227201 (2007).
7. Pinaki Sengupta, and Stephan Haas, “Quantum glass phases in the disordered Bose-Hubbard model”, *Phys. Rev. Lett.* **99**, 050403 (2007).
8. Pinaki Sengupta, Aditya Raghavan, and Stephan Haas, “Disorder-enhanced phase coherence in trapped bosons on optical lattices”, *New J. Phys.* **9** (4) 103 (2007).
9. Pinaki Sengupta, Leonid P. Pryadko, “Quantum degenerate Bose-Fermi mixtures on 1-D optical lattices”, *Phys. Rev. B* **75**, 132507 (2007).